

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

Claim 1. (Currently Amended) An elastomer composite comprising an elastomer and particulate filler dispersed in the elastomer, the particulate filler comprising at least one carbon black having structure and surface area values meeting the equation $CDBP \leq (BET \div 2.9) - X$, wherein X is about 5.

Claim 2. (Original) An elastomer composite in accordance with claim 1 comprising at least 60 phr of the particulate filler.

Claim 3. (Currently Amended) An elastomer composite in accordance with claim 1 comprising at least 60 phr of the carbon black meeting the equation $CDBP \leq (BET \div 2.9) - X$, wherein X is about 5.

Claim 4. (Currently Amended) An elastomer composite in accordance with claim 1 wherein the particulate filler further comprises at least one additional filler material having structure and surface area values not meeting the equation $CDBP \leq (BET \div 2.9) - X$, wherein X is about 5.

Claim 5. (Original) An elastomer composite in accordance with claim 1 wherein the elastomer is selected from natural rubber, a homopolymer, copolymer or terpolymer of butadiene, styrene, isoprene, isobutylene, 2,3-dialkyl-1,3-butadiene where the alkyl group is C1 to C3 alkyl, acrylonitrile, ethylene or propylene.

Claim 6. (Original) An elastomer composite in accordance with claim 1 wherein the elastomer comprises natural rubber.

Claim 7. (Original) An elastomer composite in accordance with claim 1 further comprising at least one additive selected from antiozonants, antioxidants, plasticizers, processing aids, resins, flame retardants, extender oils, lubricants, and combinations thereof.

Claim 8. (Original) An elastomer composite in accordance with claim 1 wherein the elastomer composite has a tear strength, as measured by test method ASTM-D624 using Die C, of at least about 160 N/mm.

Claim 9. (Original) An elastomer composite comprising a general purpose rubber and particulate filler dispersed in the general purpose rubber, wherein the particulate filler comprises an amount of at least one carbon black effective in said general purpose rubber to achieve tear strength, as measured by test method ASTM-D624 using Die C, of at least about 160 N/mm.

Claim 10. (Original) An elastomer composite comprising an elastomer and particulate filler dispersed in the elastomer, the elastomer composite having

Shore A hardness, measured in accordance with test method ASTM-D1415, greater than about 65;

tensile strength, measured in accordance with test method ASTM-D412, greater than 30 megapascals; and

elongation at break, measured in accordance with test method ASTM-D412, of at least about 600 %;

wherein the particulate filler comprises carbon black having structure and surface area values meeting the equation $CDBP \leq (BET \div 2.9)$.

Claim 11. (Original) An elastomer composite in accordance with claim 10 having tear strength, as measured by test method ASTM D-624, of at least 160 N/mm.

Claim 12. (Original) An elastomer composite comprising a general purpose rubber and particulate filler dispersed in the general purpose rubber, wherein the particulate filler comprises an amount of at least one carbon black effective in said general purpose rubber to achieve:

Shore A hardness, measured in accordance with test method ASTM-D1415, greater than about 65;

tensile strength, measured in accordance with test method ASTM-D412, greater than 30 megapascals; and
elongation at break, measured in accordance with test method ASTM-D412, of at least about 600 %.

Claim 13. (Original) An elastomer composite in accordance with claim 12 wherein said carbon black has structure and surface area values meeting the equation $CDBP \leq (BET \div 2.9)$.

Claim 14. (Original) An elastomer composite in accordance with claim 12 wherein said elastomer has tear strength, as measured by test method ASTM-D624 using Die C, of at least about 160 N/mm.

Claim 15. (Cancelled)

Claim 16. (Original) An elastomer composite in accordance with claim 1 wherein the particulate filler comprises at least one carbon black having structure and surface area values meeting the equation $CDBP \leq (BET \div 2.9) - X$, wherein X is about 10.

Claims 17-28 (Cancelled)

Claim 29. (Original) An elastomer composite in accordance with claim 1, wherein the particulate filler comprises at least one carbon black having a CDBP value of about 43 to 45 mL/100g and a BET value of about 260 to 264 m²/g.

Claim 30. (Original) An elastomer composite in accordance with claim 29 wherein the at least one carbon black is present at a loading level from about 50 to 110 phr based upon the weight of the elastomer in the elastomer composite.

Claim 31. (New) The elastomer composite of claim 10 wherein the particulate filler comprises carbon black having structure and surface area values meeting the equation $CDBP \leq (BET \div 2.9) - X$, wherein X is about 5.

Claim 32. (New) The elastomer composite of claim 12 wherein said carbon black has structure and surface area values meeting the equation $CDBP \leq (BET \div 2.9) - X$, wherein X is about 5.

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